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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,396	09/21/2005	Ramon Guimil	2923-718	2756
6449 7590 12/11/2007 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			EXAMINER HA, JULIE	
			ART UNIT 1654	PAPER NUMBER
			NOTIFICATION DATE 12/11/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

# Office Action Summary

Application No.

10/540,396

Applicant(s)

GUIMIL ET AL.

Examiner

Julie Ha

Art Unit

1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 4-5 and 12-13, drawn to a process for synthesizing biopolymers by stepwise assembly from synthesis building blocks wherein the building block with the two-stage protective group has the general formula (I).

Group 2, claim(s) 6, drawn to a process for synthesizing biopolymers by stepwise assembly from synthesis building blocks wherein the photoactivatable group has the general formula (II).

Group 3, claim(s) 7, drawn to a process for synthesizing biopolymers by stepwise assembly from synthesis building blocks wherein the photoactivatable group has the general formula (III).

Group 4, claim(s) 8, drawn to a process for synthesizing biopolymers by stepwise assembly from synthesis building blocks wherein the photoactivatable group has the general formula (IV).

Group 5, claim(s) 9, drawn to a process for synthesizing biopolymers by stepwise assembly from synthesis building blocks wherein the photoactivatable group has the general formula (V).

Group 6, claim(s) 22-24, drawn to a compound of the general formula (I).

Group 7, claim(s) 25-26, drawn to a method of use of compounds of the general formula (I).

It is noted that claims 25-26 recite the language "use of compounds of the general formula (I)." "Use" claim language is improper under U.S. practice. Thus, for the

purposes of this restriction, "use of compounds of general formula (I)" claims have been interpreted as a "method of use." Accordingly, claims 25-26 have been grouped as a method claim.

### ***Linking Claims***

2. Claims 1-3, 10-11 and 14-21 link(s) inventions 1 through 5. The restriction requirement among the linked inventions is **subject to** the nonallowance of the linking claim(s), claims 1-3, 10-11 and 14-21. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions **shall** be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104 **Claims that require all the limitations of an allowable linking claim** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

3. Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

5. The inventions listed as Groups 1-7 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature that is a process for the synthesis of biopolymers by stepwise assembly from synthesis building blocks which carry protective groups wherein the synthesis building blocks have the general formula (I) and the compound of general formula (I) are taught by Guimil et al (PG Pub 2004/0197851, see claims 1-21) which has a filing date of August 24, 2001 and a publication date of October 7, 2004, which can be used as a 102(e). The unity of invention thus if broken. Furthermore, the MPEP states the following: "Unity of invention has to be considered in the first place only in relation to the independent claims in an international application and not the dependent claims... The examiner should bear in mind that a claim may also contain a reference to another claim even if it is not a dependent claim as defined in PCT Rule 6.4. One example of this is a claim referring to a claim of a different category (for example, "Apparatus for carrying out the process of Claim 1...", or "Process for the manufacture of the product of Claim 1..."). Similarly, a claim to one part referring to another cooperating part, for example, "plug for cooperation with the socket of Claim 1..." is not a dependent claim" See PCT 1801.

### ***Election of Species***

6. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Different synthesis building blocks with two-stage protective group due to different variables;

Different photoactivatable protective group;

Different linker group (L);

Different synthesis building block (X);

Different chemical treatment step: treatment with a base, treatment with acid, an oxidation, a reduction, or catalysis from an enzymatic reaction;

Different labeling groups;

Different biopolymers: nucleic acids, nucleic acid analogs, peptide or saccharides.

7. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

8. If one group from Groups 1-5 is elected, Applicant is required to elect a single disclosed species of biopolymer, synthesis building block with the two-stage protective group (wherein all of the variables identified to arrive at a single disclosed species), chemical treatment step, and labeling groups. For example, Applicant elects Group I, and elects the nucleic acid as biopolymer, synthesis building block with two-stage protective group wherein  $R_1$  is NHZ,  $R_3$  is  $C_3$  alkyl, each M is FITC, m is 1, Y is nitroveratryloxycarbonyl (NVOC), and Z is acetyl; please elect a single disclosed species of building block (the Examiner isn't sure if this is the same as the biopolymers claimed), linker (L) is a bond, chemical treatment involving enzyme reaction (name the enzyme reaction). If one of group from Groups 6-7 is elected, Applicant is required to elect a single compound having general formula (I) that encompasses all of the variables to arrive at a single compound. For example, Applicant elects Group 6, wherein  $R_1$  is NHZ,  $R_3$  is  $C_3$  alkyl, each M is FITC, m is 1, Y is nitroveratryloxycarbonyl

(NVOC), linker (L) is a bond, and Z is acetyl; please elect a single disclosed species of building block.

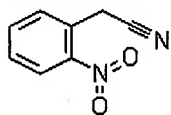
9. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

10. The claims are deemed to correspond to the species listed above in the following manner:

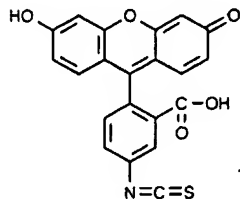
2, 5-9, 14-15, 22 and 25

The following claim(s) are generic: 1, 3, 4, 10-13, 16-21, 23-24 and 26.

11. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Different species of synthesis building blocks with two-stage protective group are patentably independent and distinct due to different variables leading to different structures. For example, a compound having a general formula (I) would not have the same structure as a compound having a general formula (II), since the variables are different. Further, search for one would not necessarily lead to the other. Different photoactivatable protecting group are patentably independent and distinct because of the different structures of these protecting group. For example, nitrobenzyl compounds

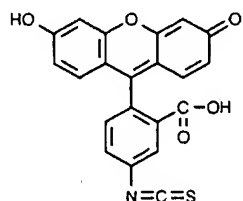


(o-nitrobenzyl cyanide) have different structure than fluorescein



. Further, search for one would not necessarily lead to the other. Different linker groups are patentably independent and distinct due to different structures. Further, search for a compound having one linker would not necessarily lead

to a compound having another linker. Different synthesis building blocks are patentably independent and distinct due to different structures. For example, nucleophilic glycosidic building blocks are different from phosphoramidite synthons (described in instant specification paragraph [0003]). Nucleophilic glycosidic building blocks are used to make amino acids, while phosphoramidite building blocks are used to make nucleic acids. Further, search for one would not necessarily lead to the other. Different chemical treatment is patentably independent and distinct because of different chemicals and reagents and reactions involved. For example, an enzymatic reaction involves an enzyme, buffer system, temperature, etc. An acid reaction involves a specific acid, and may involve different solvent, reagent and temperature. Further, search for one would not necessarily lead to the other. Different labeling groups are patentably independent and distinct because they have different structures. For example, a labeling probe can be fluorescent probe, chemiluminescent or radioactive. Radioactive materials (such as  $C^{13}$ ,  $H^3$ , etc) are structurally different than fluorescent compounds, such as fluorescein



. Further, search for one would not necessarily lead to the other. Different biopolymers are patentably independent and distinct because the biopolymers have different structures. For example, peptides have peptidic bonds with N- and C-terminals, while nucleic acids have heterocyclic base, a pentose sugar, and a phosphate group. Further, search for one would not necessarily lead to the other.

12. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

13. The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.



14. Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

15. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Ha whose telephone number is 571-272-5982.

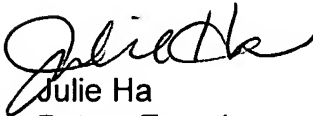
The examiner can normally be reached on Mon-Fri, 8:00 am to 4:30 pm.

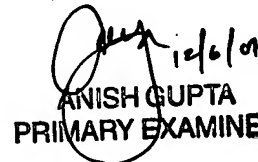
17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/540,396  
Art Unit: 1654

Page 9

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Julie Ha  
Patent Examiner  
AU 1654

  
ANISH GUPTA  
PRIMARY EXAMINER